



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 20 2013

REPLY TO THE ATTENTION OF:
WU-16J

CERTIFIED MAIL 7009 1680 0000 7674 5338
RETURN RECEIPT REQUESTED

Mr. Scott McDonald
Project Manager
Archer Daniels Midland Company
4666 Faries Parkway
Decatur, Illinois 62526

Subject: Request for Information Regarding Archer Daniels Midland (ADM) Well CCS #2, United States Environmental Protection Agency Underground Injection Control (UIC) Permit Application #IL-115-6A-0001

Dear Mr. McDonald:

We are in the process of completing the five project plans required by the regulations at 40 CFR 146.82. In order to complete these plans we need additional information that was missing in the permit application. The required information is listed in the attached document titled:

"Preliminary questions for ADM to support development of GS project plans for the CCS#2 Facility." Please submit this information not later than 30 days from the receipt of this letter.

Inquiries concerning the contents of the enclosure may be directed to Dana Rzeznik of my staff by telephone at (312) 353-6492 or by email to rzeznik.dana@epa.gov.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Rebecca Harvey".

Rebecca Harvey, Chief
Underground Injection Control Branch

cc: Mark Burau, ADM, with enclosure
Stephen Nightingale, IEPA

Enclosure

Preliminary questions for ADM to support development of GS project plans for the CCS#2 Facility

AoR and Corrective Action

Please provide additional information on the quantitative thresholds that would trigger a revision of the AoR model (e.g., statistical differences between monitoring data and modeling predictions).

Testing and Monitoring

Will any of the same monitoring techniques/locations (i.e., for ground water monitoring and plume and pressure front tracking) for CCS #1 be used in monitoring for CCS #2?

What laboratory/chain of custody procedures will be used for the CO₂ stream analysis?

What devices will be used to continuously monitor injection pressure, rate, and volume – will they be the same types as for CCS #1?

At what frequency will parameters other than annular pressure and fluid volume changes will be recorded?

Will ADM also monitor water quality in the St. Peter Sandstone? (The initial permit application stated that the monitoring wells are in the Pennsylvanian bedrock, which was stated to be the lowermost USDW.) Also, does the new information about USDWs in the revised AoR information submitted in June 2012 affect ADM's proposed operations at all?

Does ADM have access to all monitoring locations identified in Appendix F.1 (i.e., are they on ADM property; if not, how will access be guaranteed)?

On what dates will external MITs be performed?

On what dates will corrosion monitoring be performed?

On what dates will pressure fall-off testing be performed?

What direct and indirect methods do ADM plan to use to track the CO₂ plume and pressure front? The permit application briefly describes direct pressure monitoring and downhole fluid sampling in the verification well and 2D and 3D seismic surveys; however details on the sampling locations/locations of geophone wells, survey resolution/scope, etc. are needed.

Well Plugging

Does ADM plan to perform the same type of external MIT (i.e., temperature logging) prior to plugging the injection well as those performed during the injection phase?

Please provide an injection well plugging plan based on volume calculations and schematics; this will help ensure agreement about how this will proceed and avoid the need to modify the permit.

Post-Injection Site Care and Site Closure

Will any of the same monitoring techniques/locations (i.e., for ground water monitoring and plume and pressure front tracking) for CCS #1 be used in post-injection monitoring for CCS #2?

How does ADM plan to track the CO₂ plume and pressure front after injection has ceased?
Please provide information about the location of monitoring wells, timing/extent of geophysical surveys.

Will the same quality assurance and surveillance measures used in monitoring during injection operations apply to post-injection monitoring?

On what criteria does ADM plan to base its non-endangerment demonstration? This is recommended to be included in the Post-Injection Site Care and Site Closure Plan to establish what will be needed to make an acceptable non-endangerment demonstration.

How will ADM guarantee access to ground water monitoring locations throughout post-injection monitoring?

Can ADM provide a monitoring well plugging plan with depths of plugs and schematics?

How does ADM plan to restore the site to its pre-injection condition following site closure?

Emergency and Remedial Response Plan

The map in the draft Emergency and Remedial Response Plan in Appendix H has insufficient detail and clarity to allow a complete review – can ADM provide a better map?

Please provide contact information for the site and project personnel identified in the Emergency and Remedial Response Plan.

What staff training and exercise procedures are in place to facilitate response to emergency events?

Can ADM provide a Safety and Health Plan for the facility?